

# Mineral Industry Surveys

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## ZINC IN JUNE 2005

Domestic mine production (recoverable) of zinc in June of 64,000 metric tons (t) was about 20% more than that in May and about 8.5% more than that in June 2004, according to the U.S. Geological Survey. Estimated smelter production of 23,700 t was about 1% less than in May and about 17% less than in June 2004. Apparent consumption of 87,900 t was about 6% higher than in May and 10% lower than in June 2004. Mine production for the first half of 2005 was up by about 3% from that of the first half of 2004 while smelter production and apparent consumption were down by about 15% and 13%, respectively, over the same period.

The Platts Metals Week average composite price for North American Special High Grade zinc increased to 61.73 cents per pound in June. The price was 2% (1.27 cents per pound) higher than in May and 20% (10.4 cents per pound) higher than in June 2004. The average London Metal Exchange Ltd. (LME) cash price increased to \$1,275.33 per metric ton, a 2.6% increase compared with the May price and a 25% increase compared with that in June 2004. During June, LME zinc stocks rose by 88,250 t to 611,175 t.

In the United States, the producers' premium was 3.25 cents per pound, unchanged from that in May. Availability of metal on the spot market, brought on by weak demand from steel mills, kept premiums from rising. Domestic shipments have been reduced by increased imports of galvanized products and lackluster activity in the construction and automobile sectors (CRU International Ltd., 2005).

In Western Europe, under market conditions similar to those in North America, galvanized sheet production fell in the second quarter by an estimated 6% to 7.76 million metric tons (Mt). The European zinc market, however, has been balanced by some recent smelter closures (CRU International Ltd., 2005).

The Chinese iron and steel industry has forecasted an apparent consumption of 10 Mt of galvanized steel sheet for 2005, and domestic output was expected to increase 36% from 2004 levels to 5.75 Mt. For the first 5 months of the year, China's refined zinc imports increased by 55% to 128,200 t, while exports of

refined metal declined by 4% to 73,200 t. The importation of zinc concentrates has also increased significantly in the first 5 months, up 7.5% to 254,600 t (CRU International Ltd., 2005; Antaika, 2005).

On June 1, United Steelworkers of America members approved strike authority for the negotiators representing the union in labor contract talks at the Teck Cominco Limited's 296,000-metric-ton-per-year (t/yr) zinc smelter in Trail, British Columbia, Canada. The prior 4-year contract expired on May 31. Two Steelworkers locals represent about 90% of the workforce at the smelter. At Korea Zinc Company's 100,000-t/yr Big River Zinc electrolytic refinery in Sauget, IL, hourly workers voted June 2 to approve a new 3-year contract just as their old agreement was to expire (Platts Metals Week, 2005).

The National Defense Stockpile aggregated cash disposal (sale) of zinc in June, under the monthly Basic Ordering Agreement DLA-Zinc-004, was 2,955 t (approximately 3,257 short tons) with an approximate value of \$3.83 million. The following companies were awarded contracts in the June zinc sale: Arco Alloys Corp., Detroit, MI; Colonial Metals Co., Columbia, PA; Horsehead Corp., Monaca, PA; Ritchey Metals Co., Hendersonville, PA; South Atlantic, LLC, Pinehurst, NC; U.S. Zinc, Pittsburgh, PA (Defense National Stockpile Center, 2005).

## References Cited

- Antaika, 2005, Market Commentary—Zinc in June: Antaika, China Metal Market – Lead & Zinc, Tin Monthly, no. 104, July, p. 4-6.
- CRU International Ltd., 2005, CRU Monitor—Zinc: CRU International Ltd., July, 12 p.
- Defense National Stockpile Center, 2005, Stockpile announces zinc BOA sales for June 2005: Fort Belvoir, VA, Defense National Stockpile Center news release, July 5, 1 p.
- Platts Metals Week, 2005, Zinc producers in labor talks in US, Canada, Peru: Platts Metals Week, v. 76, no. 23, June 6, p. 12.

TABLE 1  
SALIENT ZINC STATISTICS<sup>1</sup>

(Metric tons, unless otherwise specified)

	2004	2005			
	January- December	April	May	June	January- June
<b>Production:</b>					
Mine, zinc content of concentrate	739,000	58,900	55,400	66,400	361,000
Mine, recoverable zinc	713,000	56,700	53,300	64,000	348,000
Smelter, refined zinc	320,000	23,400 <sup>e</sup>	23,900 <sup>e</sup>	23,700 <sup>e</sup>	144,000 <sup>e</sup>
<b>Consumption:</b>					
Refined zinc, reported	421,000	33,500	33,800	33,600	203,000
Ores <sup>e</sup> (zinc content)	727	61	61	61	363
Zinc-base scrap <sup>e</sup> (zinc content)	191,000	15,900	15,900	15,900	95,300
Copper-base scrap <sup>e</sup> (zinc content)	176,000	14,700	14,700	14,700	88,000
Aluminum-and magnesium-base scrap <sup>e</sup> (zinc content)	1,430	120	120	120	717
Total <sup>e</sup>	790,000	64,300	64,500	64,400	387,000
Apparent consumption, metal <sup>2</sup>	1,160,000	91,300	82,900	87,900	514,000 <sup>3</sup>
<b>Stocks of refined (slab) zinc, end of period:</b>					
Producer <sup>4</sup>	XX	9,420	7,470	6,670	XX
Consumer <sup>5</sup>	XX	56,900	56,400	55,400	XX
Merchant	XX	10,200	10,200	10,200	XX
Total	XX	76,500	74,100	72,300	XX
Shipments of zinc metal from Government stockpile	31,500 <sup>r</sup>	220 <sup>r</sup>	301 <sup>r</sup>	2,960 <sup>r</sup>	4,230
<b>Imports for consumption:</b>					
Refined (slab) zinc	812,000	56,700	62,500	NA	302,000 <sup>6</sup>
Oxide (gross weight)	103,000	6,700	12,400	NA	42,400 <sup>6</sup>
Ore and concentrate (zinc content)	231,000	5,910	21,200	NA	61,300 <sup>6</sup>
<b>Exports:</b>					
Refined (slab) zinc	3,300	69	163	NA	549 <sup>6</sup>
Oxide (gross weight)	14,400	1,240	1,310	NA	5,600 <sup>6</sup>
Ore and concentrate (zinc content)	745,000	13,700	24,600	NA	102,000 <sup>6</sup>
Waste and scrap (gross weight)	53,900	3,860	3,880	NA	21,900 <sup>6</sup>
<b>Price:</b>					
London Metal Exchange, average, dollars per metric ton	\$1,047.35	\$1,299.81	\$1,243.23	\$1,275.33	\$1,294.55
Platts Metals Week North American Special High Grade, average, cents per pound	52.47	63.03	60.46	61.73	62.96

<sup>e</sup>Estimated. <sup>r</sup>Revised. NA Not available. XX Not applicable.

<sup>1</sup>Data are rounded to no more than three significant digits; except prices; may not add to totals shown.

<sup>2</sup>Smelter production plus imports minus exports plus shipments from Government stockpile plus stock change.

<sup>3</sup>Data based on reported consumption, stocks, and estimated trade data.

<sup>4</sup>Data from U.S. Geological Survey and American Bureau of Metal Statistics.

<sup>5</sup>Includes an estimate for companies that report annually.

<sup>6</sup>Includes data through May only.

TABLE 2  
REFINED ZINC PRODUCED IN THE UNITED STATES<sup>1</sup>

(Metric tons)

Month	Beginning stocks <sup>e, 2</sup>	Production <sup>e</sup>	Shipments	Ending stocks <sup>e, 2</sup>
2004:				
June	7,660	28,600	29,900	6,340
July	6,340	29,200	29,200	6,390
August	6,390	29,300	29,300	6,370
September	6,370	24,100	23,400	7,020
October	7,020	23,800	23,700	7,070
November	7,070	23,500	23,800	6,780
December	6,780	20,200	20,500	6,430
January-December	XX	320,000	321,000	XX
2005:				
January	6,430	24,600	21,200	9,860
February	9,860	25,600	24,500	11,000
March	11,000	22,700	24,000	9,760
April	9,760	23,400	23,800	9,420
May	9,420	23,900	25,800	7,470
June	7,470	23,700	24,500	6,670
January-June	XX	144,000	144,000	XX

<sup>e</sup>Estimated. XX Not applicable.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Includes stocks held at locations other than smelters.

Sources: U.S. Geological Survey and American Bureau of Metal Statistics.

TABLE 3  
APPARENT CONSUMPTION OF REFINED ZINC  
ACCORDING TO INDUSTRY USE AND PRODUCT<sup>1</sup>

(Metric tons)

Industry and product	2004	2005			
	January- December <sup>2</sup>	April	May	June <sup>2</sup>	January- June
Galvanizing:					
Sheet and strip	477,000	38,200	34,100	35,900	212,000
Other	167,000	12,900	11,100	12,100	70,100
Total	644,000	51,100	45,200	48,000	282,000
Brass and bronze	188,000	13,600	13,300	14,500	81,600
Zinc-base alloy	244,000	19,600	17,800	18,500	110,000
Other uses <sup>3</sup>	85,800	7,100	6,600	6,900	40,500
Grand total	1,160,000	91,300	82,900	87,900	514,000

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Data based on reported consumption, stocks, and estimated trade data.

<sup>3</sup>Includes zinc used in making zinc dust, desilvering lead, powder, alloys, anodes, chemicals, castings, light metal alloys, rolled zinc, and miscellaneous uses not elsewhere specified.

TABLE 4  
AVERAGE MONTHLY ZINC PRICES<sup>1</sup>

Period	North American ¢/lb.	LME <sup>2</sup> cash	
		¢/lb.	\$/t
2004:			
June	51.33	46.32	1,021.08
July	50.08	44.81	987.94
August	49.44	44.24	975.39
September	49.23	44.22	974.83
October	53.31	48.28	1,064.49
November	54.81	49.68	1,095.18
December	58.53	53.52	1,179.83
January-December	52.47	47.51	1,047.35
2005:			
January	61.54	56.51	1,245.81
February	64.49	60.14	1,325.81
March	66.49	62.47	1,377.33
April	63.03	58.96	1,299.81
May	60.46	56.39	1,243.23
June	61.73	57.85	1,275.33
January-June	62.96	58.72	1,294.55

<sup>1</sup>Special High Grade.

<sup>2</sup>London Metal Exchange.

Source: Platts Metals Week.

TABLE 5  
U.S. EXPORTS OF ZINC<sup>1</sup>

Material	2004		2005 <sup>2</sup>			
	Quantity (metric tons)	Value (thousands)	May		Year to date	
			Quantity (metric tons)	Value (thousands)	Quantity (metric tons)	Value (thousands)
Refined (slab) zinc	3,300	\$5,330	163	\$249	549	\$1,070
Ore and concentrate (zinc content)	745,000	413,000	24,600	8,580	102,000	41,100
Waste and scrap (gross weight)	53,900	48,300	3,880	4,070	21,900	23,400
Powders, flakes, dust (zinc content)	7,640	13,500	673	1,480	3,870	7,940
Oxide (gross weight)	14,400	19,800	1,310	2,150	5,600	9,560
Chloride (gross weight)	1,870	2,200	157	216	952	1,170
Sulfate (gross weight)	3,060	1,860	267	166	1,250	804
Compounds, other (gross weight)	194	711	29	50	410	407

<sup>1</sup>Data are rounded to no more than three significant digits.

<sup>2</sup>Data for June 2005 were not available at time of publication.

Source: U.S. Census Bureau.

TABLE 6  
U.S. IMPORTS FOR CONSUMPTION OF ZINC<sup>1</sup>

Material	2004		2005 <sup>2</sup>			
	Quantity (metric tons)	Value (thousands)	May		Year to date	
			Quantity (metric tons)	Value (thousands)	Quantity (metric tons)	Value (thousands)
Refined (slab) zinc	812,000	\$888,000	62,500	\$82,800	302,000	\$393,000
Ore and concentrate (zinc content)	231,000	98,700	21,200	15,600	61,300	45,800
Waste and scrap (gross weight)	10,800	7,740	821	713	3,510	3,040
Powders, flakes, dust (zinc content)	24,800	40,200	1,650	3,320	8,840	16,000
Oxide (gross weight)	103,000	89,000	12,400	12,500	42,400	48,200
Chloride (gross weight)	705	863	28	102	248	500
Sulfate (gross weight)	29,100	14,000	3,150	1,700	13,200	6,960
Compounds, other (gross weight)	4,660	4,230	611	559	2,750	2,600

<sup>1</sup>Data are rounded to no more than three significant digits.

<sup>2</sup>Data for June 2005 were not available at time of publication.

Source: U.S. Census Bureau.

TABLE 7  
SHIPMENTS OF ZINC METAL FROM THE NATIONAL DEFENSE  
STOCKPILE<sup>1</sup>

(Metric tons)

Period	Beginning inventory	Shipments	Ending inventory
2004:			
June	70,900	1,170	69,800
July	69,800	44	69,700
August	69,700	3,360	66,400
September	66,400	--	66,400
October	66,400	--	66,400
November	66,400	--	66,400
December	66,400	--	66,400
January-December	XX	31,500 <sup>r</sup>	XX
2005:			
January	66,400	20 <sup>r</sup>	66,300 <sup>r</sup>
February	66,300 <sup>r</sup>	738 <sup>r</sup>	65,600 <sup>r</sup>
March	65,600 <sup>r</sup>	--	65,600 <sup>r</sup>
April	65,600 <sup>r</sup>	220 <sup>r</sup>	65,400 <sup>r</sup>
May	65,400 <sup>r</sup>	301 <sup>r</sup>	65,100 <sup>r</sup>
June	65,100 <sup>r</sup>	2,960 <sup>r</sup>	62,100 <sup>r</sup>
January-June	XX	4,230	XX

<sup>r</sup>Revised. XX Not applicable. -- Zero.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

Source: Defense Logistics Agency.

TABLE 8  
U.S. IMPORTS OF ZINC, BY TYPE OF MATERIAL AND COUNTRY<sup>1,2</sup>

(Metric tons)

Material and country	General imports			Imports for consumption		
	2004	2005		2004	2005	
		May	Year to date		May	Year to date
Ore and concentrate (zinc content):						
Australia	27,900	8,590	8,590	27,900	8,590	8,590
Ireland	17,700	--	4,410	17,700	--	4,410
Mexico	6,530	367	4,920	6,530	367	4,920
Peru	178,000	11,800	42,800	178,000	11,800	42,800
Other	877	511	511	877	511	511
Total	231,000	21,200	61,300	231,000	21,200	61,300
Blocks, pigs, or slab:						
Australia	7,940	--	1	27,500	4,830	12,400
Brazil	26,400	5,750	18,900	26,400	5,780	19,000
Canada	501,000	46,500	218,000	501,000	46,500	218,000
China	35	--	--	16,500	--	876
Japan	--	--	--	690	--	--
Kazakhstan	2,310	--	--	2,310	--	--
Korea, Republic of	8,030	--	5,030	31,900	25	888
Mexico	123,000	5,380	50,000	123,000	5,380	50,000
Namibia	47,900	--	--	47,900	--	--
Peru	25,600	36	126	30,500	36	724
Poland	--	--	--	--	--	--
Other	204	--	--	3,970	--	225
Total	743,000	57,600	292,000	812,000	62,500	302,000
Dross, ashes, fume (zinc content)	16,100	1,280	6,300	16,100	1,280	6,300
Grand total	990,000	80,100	359,000	1,060,000	85,000	369,000
Oxide (gross weight):						
Canada	49,700	5,330	22,200	49,700	5,330	22,200
China	207	4	42	207	4	42
Italy	13,400	4,730	7,280	13,400	4,730	7,280
Japan	1,060	106	463	1,060	106	463
Mexico	33,200	1,800	9,770	33,200	1,800	9,770
Netherlands	4,700	399	2,260	4,700	399	2,260
Other	796	75	402	796	75	402
Total	103,000	12,400	42,400	103,000	12,400	42,400
Other (gross weight):						
Waste and scrap	10,800	821	3,510	10,800	821	3,510
Sheets	2,500	299	915	2,500	299	915
Powders, flakes, dust (zinc content)	24,800	1,650	8,840	24,800	1,650	8,840

-- Zero.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Data for June 2005 were not available at time of publication.

Source: U.S. Census Bureau.